REMARKS

Applicants gratefully acknowledge the courtesy of Examiner Nguyen in preparing a supplemental office action in response to applicants' request made via telephone on March 10, 2005.

Claims 1-24 are pending in this application.

Claim 22 stands rejected under 35 U.S.C. § 112, second paragraph. The basis for the rejection is not understood by Applicants, but apparently involves the "corrected wheel sensor" limitation. This rejection is respectfully traversed. Claim 22 recites a method for supplying a corrected wheel sensor signal. The second step of claim 22 requires the determination of a parameter, and the third step requires generating a corrected wheel sensor signal having the parameter. Applicants submit that this claim is entirely proper. The claim specifies that the corrected wheel sensor signal must be generated (i.e., produced) and must have the parameter determined in the determining step. Applicants respectfully submit that these limitations are clear on their face and accordingly respectfully request withdrawal of the rejection of claim 22.

Claim 24 also stands rejected under the second paragraph of 35 U.S.C. § 112. Claim 24 has been amended to recite method steps. Withdrawal of the rejection with respect to the claims as amended is respectfully requested.

Claim 22-23 stand rejected under 35 U.S.C. § 102 as being anticipated by Kumar. This rejection is respectfully traversed. Claim 22 (from which claim 23 depends) includes the steps of "determining a parameter of a signal that would be output by a wheel sensor connected to a wheel of a predetermined size if the wheel were on the train" and "generating a corrected wheel sensor signal having the parameter." These steps are neither taught nor suggested by Kumar.

As discussed in the specification at page 12, line 9 to page 13, line 11, these steps require generating a signal (e.g., a square wave) that is representative a signal that would have been

generated by a wheel sensor (e.g., a revolution counter or a tachometer) if a wheel of a predetermined size were on the train. The generated signal can then be input, for example, to a speedometer in a locomotive cab that is configured to accept a wheel sensor signal from a sensor associated with, e.g., a 40 inch wheel so that the speedometer will display the correct speed even though the actual wheel on the train may have worn down to, e.g., 36 inches. Without the method of claim 22, the speedometer would display a speed higher than the correct speed because the smaller wheel size (36 inches) would result in a higher rotational speed of the wheel and a square wave signal from the wheel sensor with a correspondingly shorter period. In contrast to the method of claim 22, Kumar discloses changing the value of a wheel diameter that is used to calculate a speed based on a signal from a wheel sensor. Accordingly, applicants respectfully request withdrawal of the rejection of claims 22 and 23.

Claims 1-21 and 24 stand rejected under 35 U.S.C. § 103 as being obvious over the combination of Kumar, Matsuno and Bidaud. This rejection is respectfully traversed. Claim 1 is directed toward a method of determining a wheel size that includes the steps of "determining a linear distance traveled by a train during a period of time by calculating a difference in positions reported by a positioning system located on the train at a start of the period and an end of the period," "repeating the determining step a plurality of times," "adding the linear distance from each of the determining steps to form a total distance," and "calculating the wheel size based on the total distance and a total number of wheel revolutions occurring during each of the determining steps." As explained in the specification at page 8, lines 11-24 and with reference to Figure 4, one situation in which multiple periods are superior to a single period is where track is curved. With curved track, a calculation of distance traveled by determining the difference between the start and end positions of a single period (e.g., the distance D_0 of Figure 4a) would

contain a significant error. In contrast, the error is much smaller (although not entirely eliminated) if multiple periods are used as illustrated in Figure 4(b).

None of the cited references, alone or in combination, disclose or suggest the steps of claim 1. Bidaud is a track geometry car that teaches nothing more than determining a total distance traveled and does not even involve determining a wheel size. Kumar discloses an integration process for correcting for changes in wheel size in which a speed (as opposed to distance) measurement from an independent source is used. Because Kumar involves an integration of a speed error, modifying Kumar by incorporating a distance calculation as taught by Bidaud would render the system of Kumar inoperable. Moreover, Kumar doesn't involve the calculation of a wheel size using data collected over multiple periods as required by claim 1 but rather continuously calculates an error signal. The office action does not cite any passage of Matsuno other than to refer to the teaching of the use of GPS, which does not cure the missing elements discussed above. Accordingly, withdrawal of the rejection is respectfully requested.

In light of the above, Applicants submit that this application is now in condition for allowance and therefore request favorable consideration. If any issues remain which the Examiner feels may be best resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact Applicants counsel, James M. Heintz at (202) 861-4167.

Respectfully submitted,

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